

II. Amendments to the Claims

Kindly cancel Claim 10, without prejudice or disclaimer of the subject matter recited therein.

Kindly amend Claims 1-8 as shown below, and add new claim 11.

Claim 1 (currently amended) A multi-wavelength laser source (MWLS) system, comprising:

(a) first and second monochromatic lasers having first (f_1) and second (f_2) lasing frequencies, respectively;

(b) means for amplifying combined signals of said first and second lasers;

(c) means for multiplying, using non-linear optical effects, the amplified combined signals to expand the coverage of the wavelength channels so as to yield comblike multi-channel WDM laser signals comprising a plurality of more than two channels separated from each other by a frequency equal to the difference between f_1 and f_2 .

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Claim 2 (currently amended) The system as defined in claim 1, said means for multiplying comprising a plurality of serially interconnected optical fiber sections each section having respective predetermined propagation characteristics for said amplified combined signals which

differ from respective predetermined propagation characteristics of any neighboring sections.

~~A~~ Claim 3 (currently amended) The system as defined in claim 2, said predetermined propagation characteristics being comprising propagation mode, dispersion, and length.

A Con'd Claim 4 (currently amended) The system as defined in claim 3, said plurality of serially interconnected fiber sections being comprising five sections having lengths L_1 , L_2 , L_3 , L_4 and L_5 , respectively, L_1 being the first section, and L_5 being the last fifth section.

Claim 5 (currently amended) The system as defined in claim 4, the third fiber section being comprising a single mode fiber (SMF) section.

Claim 6 (currently amended) The system as defined in claim 5, the first, second, fourth, and eight fifth fiber section being sections comprising dispersion shifted fiber (DSF) sections.

Claim 7 (currently amended) The system as described in claim 6, in which $L_1 = 1.1$ km, $L_2 = 1.1$ km, $L_3 = 20$ m, $L_4 = 1$ km and $L_5 = 1$ km.

Claim 8 (currently amended) The system as defined in claim 7, said fine five fiber section, sections having associated dispersion ~~value~~ values, D_1 to D_5 as follows: $D_1 = -0.399$; $D_2 = 0.402$; $D_3 = 16$; $D_4 = 0.402$ and $D_5 = -0.399$, all in units of ps/km/nm.

Claim 9 (original) The system as described in claim 8, wherein f_1 and f_2 correspond to wavelengths in the vicinity of 1550 nm.

R' word
Claim 10 (cancelled)

Claim 11 (new) A system as defined in claim 2 comprising means for modulating said first and second monochromatic lasers when the first and second monochromatic lasers are lasing by a very low frequency signal whereby Stimulated Brillouin Scattering of the amplified combined signals is reduced.